**Comp 3020: Project Milestone 1**

**Part (A): Identify your project idea**

The project our team chose to design is a system for buying movie tickets online, with the expectation of bringing convenience to customers. When compared to the traditional way of purchasing tickets, buying movie tickets online with our system helps consumers save time by avoiding lines. In addition, it allows them to plan ahead and decide which movie they want to watch and whether they want to purchase food before going to the movie theater. Due to our system, users will be able to go to the theater without the stress of waiting in line to purchase tickets or food. By making the process more convenient for the user, we enhance the experience for movie watchers.

We would expect the majority our user group to be financially independent young adults who are familiar with computers, followed by teenagers who enjoy watching movies with all their friends. Another user group we would consider are the older adults who are likely movie enthusiasts, since they would want to order tickets online early to get the show time that best fits their schedule.

Our system would be expected to perform under a variety of situations, including while users are in a rush and need to purchase their movie ticket on the way to the theatre, or while users are in the comfort of their own home. The system should provide an ideal experience no matter what situation the users are in. Going to a movie is usually under a social context, so our system should be accommodating to groups of friends or families who are going to see a movie together. For a system to purchase a movie ticket online to be effective, the system will need to be just as intuitive as purchasing a ticket at the movie theatre itself.

**Part (B): Identify stakeholders**

The main stakeholders that would be affected by this system will be the ticket purchasers. This section will focus on the different types of ticket purchasers that may be possible users of this system.

**Young Adults (Primary User)**

A primary user of our system would be the young adults. Young adults would be described as those that are in their early 20s and are in post-secondary school or are early into their careers. These users will be comfortable with purchasing tickets online and will need no training to become familiar with the site. Most of these users will have their own income whether it’s through entry-level jobs or part-time work. In addition, most of these users will have very little disposable income and would not be interested in additional options like VIP tickets.

**Families (Secondary User)**

Families would be another user of our system. Families will usually have at least one person in the family who is comfortable with purchasing tickets online. Furthermore, these families will usually have at least one working adult in the family so disposable income will be higher. Due to having higher disposable income, families may also be interested in more than just the regular ticket. Families will also need to see which seats are available and which seats will allow the family to sit together. In addition, some families will need to be able to easily purchase different tickets for children, or elderly members of the family.

**Working Adults (Secondary User)**

Working adults would be another possible user of our system. Most of these users will be above 30 years old, have stable careers and have their own families. Some of these working adults will be comfortable with purchasing tickets online however there will also be some that are uncomfortable with purchasing tickets online. Most working adults are usually busy which makes our system convenient for them as they will be able to avoid the lines and save time. Moreover, these users will have a lot more disposable income which might interest them in VIP tickets, or other additional options above the regular ticket.

**Teens (Secondary User)**

There will also be teens in high school or junior high that would be interested in using a system like ours. These teens will mostly be comfortable with working online however some may be too young to really understand how to use the system properly. Most of these teens will be going to movies in groups and will need to see which seats will allow them to sit together. Another important attribute of this user base is that most will have no disposable income, which means most will only be interested in regular tickets. In addition, teens will prefer to pay cash as they might not have access to online payment methods which may make our system used occasionally by this user group..

**Seniors(Secondary User)**

Customers above the age of 65 may also be interested in using our system. However, most of these customers will not be comfortable with purchasing tickets online. In addition, the majority of these customers will be retired and will want to avoid the stress of trying to learn how to purchase tickets online. These users may also have physical limitations that might give them difficulties when trying to interact with things like small text. In conclusion, most of these users will probably prefer to just purchase tickets the traditional way.

**Part (C): User research**

**Methods**

To help understand how to create a system for buying movie tickets online that is centered around the user experience we can use the competitive product survey method from the learn category of IDEO cards. By comparing and conducting evaluations on competitors’ products such as Cineplex or Landmark Cinema, information about functional requirements can be established. Benchmarks for performance and functionality can be discovered from understanding the competition. By learning from what is currently working and understanding the competitions’ mistakes we can bring to light proven strategies for success that allow users to have the best possible experience when buying movie tickets online.

Supplementing information from the competitive product survey method, the card sort method from the IDEO ask category can be used. Asking users to sort cards with possible features and functions of the web page can give insight into how each user expects to interact with the system. By analyzing the way in which each user sorted the cards, patterns can be put together to generalize each user’s mental model and understand what the user prioritizes. This information can then be used to create the menus for the web page and to structure the system in a way that will make it both learnable and memorable for the user. Ideally a web page for buying movie tickets should be as intuitive as buying a ticket at the theatre itself, card sort provides information to create an intuitive menu structure with the functions of the web page being right where the user expects them.

The Surveys and Questionnaires method from the ask category of IDEO cards can help attain information about the consumers perspective on the movie theatre experience. Conducting a questionnaire with a series of targeted questions is quick way to gather a large amount of information from a wide demographic of people. The information from the questionnaire can be used to put together patterns and trends that consumers from different demographics have when it comes to how they purchase their movie ticket, to how they decide what movie they are going to see. This method in conjunction with the card sort method can provide a set of functions and features to implement into the web page. The questionnaire will also provide knowledge about who the target audience of the product will be, allowing the design to be more suitable for that group of users.

**Summary**

To conduct the card sort method 15 functions and design features were written on cue cards. Potential users were then asked to organize the cue cards into groups based on what made sense to them. Through this process, patterns in which people organized the cue cards became noticeable. People had the tendency to organize cue cards into groups of items that followed a logical sequence of events. For example, purchasing a movie ticket and either printing the ticket off or receiving an electronic ticket were always put in the same group. In addition, the functions and features of movie trailers, showtimes and movies coming soon were often put in the same group, all of which directly relate to the information people would need when deciding which movie they are going to see. The way people organized the cue cards also fell into a pattern of organizing the cards in terms of category, where the root categories would be movies, ticket purchasing and extras. In most cases functions and features directly relating to a movie itself were grouped together, while the purchasing aspect and receiving the ticket were in another group. The “bonus” features such as having a prize draw or using a points card were often put into their own group. In some cases, people slightly diverged from this main pattern by putting the movie trailers feature as its own entity. This information gives an in depth look at people’s mental models and how they would expect to interact with a system where you can purchase a movie ticket online. Generalizing these mental models can then be used to construct our navigation menu for our website, creating a more learnable interface for the user.

We conducted the survey on Reddit.com, as it would be the best representation of the demographic that uses online services. Based on the 353 responses we received, we found that 70% of people that view movies in theaters are between ages 18 to 29. Out of the people in that age group, 71% of the people prefer to buy their tickets online. In addition, 80% of the people buy food at the theater, so the website will be more tailored to people in that age group. Compiling the results of our questionnaire, 70% of the people reported that they usually go to movies in the evenings. Out of the people that had preference on the showing type, 71% prefer watching movies in 2D. Based on this data, our website would prioritize 2D movies that are shown in the evenings. Unfortunately, there are less than 40% of the people that would go to the theater more than once a month. Based on this information, we would need to develop our website in a way that would entice people to go more frequently.

As for the Competitive Product Survey, we studied websites designed by Cineplex and Landmark Cinemas. We conducted a survey on some of the features that they offer. For example, the Cineplex website allow consumers to purchase or rent movies. We asked if anyone purchases or rents movies from theater websites, and out of the 353 responses 97% of people responded “never”. We also asked if they watch the movie trailers on the theater websites, only 14% of the people frequently watch trailers on the website. The majority of users watch trailers on other video hosting platforms. As for gift card usage, only 36% of people use gift cards when purchasing movie tickets. Based on the data we collected, it’s safe to say that these features will not be a priority when it comes to designing our website.

**Part (D): Requirements**

**Functional**

**Must Have:**

* Be able to purchase a movie ticket online/financial transactions
  + The ability to purchase a movie ticket online is the main function of the website.
* Print movie ticket/Receive electronic ticket
  + Must provide user a way to give the user the ticket they purchased.
* Check status of movie
  + To prevent users from purchasing tickets to movies that are sold out.
* Show the user admission prices
  + To provide the user with information about the price of the movie.
* Show the user showtimes
  + To allow the user to choose a movie based on their schedule.
* Show the user different cinemas
  + To allow the user to see all the theatres in their area, so they can choose the theatre most convenient for them.

**Should Have:**

* Pick your movie seat and see which ones are taken
  + Allows users to sit together with friends or family, and book seats accordingly.
* Login to save credit card info
  + Will make future purchases faster and easier.
* Food vouchers
  + Our data shows that the majority of users purchase food in theatres, this allows people to save time by not having to pay for food at the theatre.

**Could Have:**

* Use points card/see how many points are on your card
  + Gives the user incentive to attend more movies and reward those who see a lot of movies.
* Check the deals for the day/Food Combos
  + Provides the user with convenience of checking the food combos from home.
* Movie trailers
  + Allows the user to decide what movie they want to purchase a ticket for.
* Prize draw
  + Incentive to use the website more often.

**Data**

**Must have:**

* System must have access to showtimes
  + To inform the users about show times so they can schedule accordingly.

**Should Have:**

* Storing credit card information/user information
  + To allow the user to have a more streamlined experience, rather than entering their credit card information every time they purchase a movie ticket.
* System must have access to food prices/admission prices
  + Storing information about food and admission prices allows the users to know how much money they will be spending before going through the process of purchasing a ticket.
* System must have access to the status of a movie
  + Being able to view the seat limit from the website can accommodate large groups or families who plan to see a specific movie.

**Could Have:**

* System must access a database of points cards and how many points are on each unique card
  + Need to store points card data to allow the users to redeem their points right on the website, for example when they’re purchasing a movie ticket or a food voucher.
* Store past history of movies users have purchased tickets for
  + Could allow the user to receive updates about movies that are coming soon in which they might be interested in seeing, based off of their past history.

**Environmental**

**Must have:**

* Users might need to use the system in a rush
  + To allow the users to buy tickets on the way to avoid coming late without ticket.

**Should Have:**

* Users might want to purchase tickets in groups
  + To allow the users to purchase the tickets by group, and then they will get a link to pay the bill separately.

**Could Have:**

* Users might be purchasing tickets without access to a computer
  + Will need to provide a good mobile experience, for users who might be purchasing a ticket on the go.

**User**

* Majority of users will be 18-29
  + The data we collected has shown that the vast majority of users will be between the ages of 18-29.
* Novice/Casual users
  + Users of the website will not be experts, they will just want a simple and easy way to purchase tickets. Most of the users will only be casual users since our data showed that only 36% of people go to the theater more than once a month.
* Mainly english speaking users
  + Since we will be based in Canada, most of our user base will be english speakers.

**Usability**

* Safety
  + The website must ensure that all users’ credit card information are safely stored.
* Learnable
  + The website must be easy to grasp, allowing the user to learn its intended features in a short amount of time.
* Efficient
  + The website has to allow the user to make purchases quickly. This means taking very few steps to accomplish its intended functions.
* Memorability
  + The main functions of the website must be easy to remember, since most users would only use it less than once a month.

**Part (E): Scenarios**

**Scenario 1: A family purchasing tickets**

In this scenario, a family might be interested in watching a movie together. The family consists of two working adults, one teen, one child, and two seniors. Since the age groups of the users are diverse, they may want to watch different movies. They will go through our website and be able to see the different movies that are playing and even watch the trailers for these movies to help them decide what to watch.

Once they have decided which movie to watch, it will be easy for the family to purchase the tickets, then choose the show time and theater of their choice to get to the ticket purchase screen. In the ticket purchase screen, they will have the options to add the necessary tickets of their choice. The family then chooses three regular tickets, two senior tickets, and one child’s ticket.

After choosing the tickets, they will now need to select their seats. Seat selection will be simple as our website will have a diagram of the seat layout in the theater. The family simply looks for six seats together that are available. After selecting the seats of their choice, the website will then show extra options that they may want, like food or drinks. The kids want popcorn while watching the movie so the family simply adds three popcorn vouchers into the order.

Since they have now selected their seats and have ordered their popcorn, all the family needs to do now is to pay. The website will ask them to either log in or complete their purchase with their credit card. Since the family is a regular, they will login to their account that already has their credit card information stored, select that credit card as the payment method, and confirm their purchase. The family then heads to the theatre, redeeming their popcorn vouchers and showing their ticket to enter the movie.

**Scenario 2: Two Young Adults After Dinner**

In this scenario, two young adults are having dinner in a restaurant on a Friday night and decide they want to watch a movie. Because it is a Friday night, they realize that the ticket line in the movie theater is going to be very long, so they decide to use our website to avoid the line. Since they just finished eating dinner, it is already late in the night so they will have to look for late showings.

After going through the current show times, the couple decide on the movie they want to watch. The couple navigates to the show time for the movie they chose and arrive at the ticket selection area of the website. Next, the couple selects where they want to sit with the seat selection screen, which shows you seat availability and allows them to choose two seats where they will be able to sit together. Selecting their seats then brings them to the food selection area where they won’t be interested since they just had dinner, so they skip this section and proceed to checkout. The website will then prompt them to log in or pay with a credit card. Since they don’t have an account, they decide to just pay with a credit card directly. After entering their credit card details and completing their purchases, they receive their electronic ticket that they need to enter the theater.